

**Appendix D. Table D-1. Fish That Occur at Pipeline Waterway Crossings<sup>a</sup>**

Waterway	Crossing Number <sup>b</sup>	Atlas Page <sup>c</sup>	Crossing Type <sup>d</sup>	Fish That Occur at Pipeline Waterway Crossings	
				Salmonids <sup>e</sup>	Non-Salmonids <sup>f</sup>
Little Bear Creek	1	1	D	CT, <u>SS</u> , <u>RS</u>	COT, TS, WL, SD
Unknown	4	1	UC	CT, <u>SS</u>	COT
Ricci Creek	9	4	D	CT	COT
Snoqualmie River	11	5	Bridge	CT, RB, <u>BC</u> , <u>DV</u> , <u>SCT</u> , <u>SHW</u> , <u>SHS</u> , <u>CF</u> , <u>SS</u> , <u>CH</u> , <u>PS</u>	COT, WF, LRS, TS, <u>PL</u> , WL, <u>RL</u> , NSF, <u>GS</u> , <u>WS</u> , LND, SD, RS, PM
Peoples Creek	14	6	OC	CT, <u>SS</u>	COT, WL
Peoples Creek	15	6	F	CT	COT, WL
Unnamed	17	7	OC	CT	COT, WL
Unnamed	18	7	F	CT, <u>SS</u>	COT, WL
N.F. Cherry Creek	19	8	F or D	CT, <u>SS</u>	COT
Cherry Creek	20	8	D or F	CT, RB, <u>SCT</u> , <u>SHW</u> , <u>SS</u> , <u>CH</u> , <u>PS</u> , <u>CF</u>	COT, WL, <u>PL</u>
Harris Creek	22	9	D	CT, <u>SCT</u> , <u>SS</u> , <u>CH</u>	COT, WL
Unnamed	23	9	F	CT	COT
Tolt River	26	11	D	CT, RB, <u>SHW</u> , <u>SHS</u> , <u>SS</u> , <u>CH</u> , <u>CF</u> , <u>PS</u>	COT, WL, WF
Tolt River (side channel)	27	11	D	CT, RB, <u>SHW</u> , <u>SHS</u> , <u>SS</u> , <u>CH</u> , <u>CF</u> , <u>PS</u>	COT, WL, WF
Griffin Creek	28	12	D	CT, <u>SS</u>	WL, COT
Unnamed	29	12	OC	D	D
Unnamed	31	12	OC	D	D
Tokul Creek	34	14	Bridge	CT, EB	WL, COT
Unnamed	35	14	OC	CT	COT
Snoqualmie River	38	14	Bridge	CT, RB	COT, WF, WL, LRS

Waterway	Crossing Number <sup>b</sup>	Atlas Page <sup>c</sup>	Crossing Type <sup>d</sup>	Fish That Occur at Pipeline Waterway Crossings	
				Salmonids <sup>e</sup>	Non-Salmonids <sup>f</sup>
Meadowbrook Slough	39	15	Bridge	<b>CT</b>	COT
Meadowbrook Slough	39A	15	Bridge	<b>CT</b>	COT
Unnamed	41	15	Bridge	<b>CT</b>	COT
S.F. Snoqualmie R.	42	15	Bridge	<b>CT. RB</b>	COT, WF, WL, LRS, LND
S.F. Snoqualmie R.	43	17	Bridge	<b>CT. RB</b>	CPT, WF, WL, LRS, LND
Boxley Creek	44	17	F or D	<b>CT. RB</b>	COT
Unnamed	50	19	OC	<b>CT. RB</b>	COT
Unnamed	51	19	OC	NF	NF
Change Creek	52	19	Bridge	<b>CT. RB</b>	COT
Hall Creek	53	19	WET	<b>CT. RB</b>	COT
Unnamed	54	19	OC	NF	NF
Unnamed	55	19	OC	<b>CT. RB</b>	COT
Unnamed	56	19	OC	NF	NF
Mine Creek	57	19	WET	<b>CT. RB</b>	COT
Wood creek	59	20	OC	D	D
Alice Creek	60	20	OC	D	D
Carter Creek	72	20	F or D	<b>CT. RB</b>	COT
Unnamed	73	22	UC	NF	NF
Unnamed	73A	22	UC	NF	NF
Unnamed (USFS)	74	22	UC	NF	NF
Hansen Creek (USFS)	75	22	F or D	<b>CT</b>	COT
Unnamed (USFS)	77	22	UC	<b>CT. RB</b>	COT
Humpback Creek (USFS)	78	23	WET	<b>CT</b>	COT
Olallie Creek	82	24	D	D	D

Waterway	Crossing Number <sup>b</sup>	Atlas Page <sup>c</sup>	Crossing Type <sup>d</sup>	Fish That Occur at Pipeline Waterway Crossings	
				Salmonids <sup>e</sup>	Non-Salmonids <sup>f</sup>
Rockdale Creek	84	24	Avoided	D	D
Mill Creek (USFS)	86	26	OC	<b>RB, WCT, BC, EB, K</b>	COT, MS, PW
Cold Creek (USFS)	88	26	OC	<b>RB, WCT, BC, EB, K</b>	COT, MS, PW
Roaring Creek (USFS)	97	27	D	<b>RB, WCT, BC, EB, K</b>	COT, MS, PW, BR
Meadow Creek (USFS)	99	27	D	<b>RB, WCT, BC, EB, K</b>	COT, MS, PW, BR
Mosquito Creek (USFS)	103	28	D	<b>RB</b>	COT, MS
Stampede Creek (USFS)	104	28	OC or UC	<b>RB</b>	COT, MS
Cabin Creek	117	32	D	<b>RB, WCT, BC, EB, <u>SHS, CSP</u></b>	COT, MS, LND, SD, LD, WF
Main Canal	123	32	B	<b>RB</b>	COT, MS, LND, SD, LD, WF
Tucker Creek	124	33	F	<b>RB</b>	COT, MS, LND, SD, LD
Main Canal	125	33	B	<b>RB</b>	COT, MS, LND, SD, LD, WF
Big Creek	127	34	D or F	<b>RB, WCT, <u>SHS, CSP</u></b>	COT, MS, LND, SD, LD, RS
Little Creek (USFS)	129	34	D or F	<b>RB, WCT, <u>SHS, CSP</u></b>	COT, MS, LND, SD, LD, RS
Granite Creek	131	35	F	<b>RB</b>	COT
Spex Arth Creek	132	35	UC	<b>RB</b>	COT
Tillman Creek	133	37	F	<b>RB, EB</b>	COT, MS, LND, SD, LD
Thornton Creek	143	40	D	<b>RB</b>	COT, LND, SD, LD
Main Canal	146	41	B	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Yakima River	147	41	D	<b>RB, WCT, BC, BT, EB, <u>SHS, CSP</u></b>	WF, <b>SR</b> , NSF, SD, LND, LRS, BRS, COT, LD, RS, MS, <u>PL</u> , PM, TS
Swauk Creek	151	43	F	<b>RB, WCT, BC, EB, <u>SHS, CSP</u></b>	COT, WF, TS, LRS, MS, LND, SD, RS, LD
Reecer Creek	166	46	D	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Jones Creek	168	46	D	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Jones Creek	169	46	F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD

Waterway	Crossing Number <sup>b</sup>	Atlas Page <sup>c</sup>	Crossing Type <sup>d</sup>	Fish That Occur at Pipeline Waterway Crossings	
				Salmonids <sup>e</sup>	Non-Salmonids <sup>f</sup>
Jones Creek	170	47	F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
North Branch Canal	174	47	B	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Unnamed	176	47	F	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Currier Creek	177	47	F	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Unnamed	181	48	D or F	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Unnamed	182	48	F	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Unnamed	183	49	F	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Unnamed	185	49	F	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Wilson Creek	187	49	D or F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Canal	188	50	B	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Canal	189	50	B	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Naneum Creek	190	50	D or F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Naneum Creek	193	50	D or F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Cascade Canal	194	51	B	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Unnamed	195	51	F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Coleman Creek	196	51	D or F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Canal	198	51	B	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Cooke Creek	199	52	WET	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Cascade Canal	203	53	B	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Parke Creek	205	53	D or F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Parke Creek	206	54	D or F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Highline Canal	207	55	B	<b>RB</b>	COT, LND, SD, LD, WF, LRS
Gettys Cove (BLM)	18A	63	D	<b>RB, BC, SHS, CSP, CF, CS</b>	LMB, SMB, WAL, CC, <u>WS</u> , <u>PL</u> , WC, SR, CM, BRS, LSS, LNS, NSF, SD, LND, LD, RS, GF, PM, LC, BC, YP, PS, COT,

Waterway	Crossing Number <sup>b</sup>	Atlas Page <sup>c</sup>	Crossing Type <sup>d</sup>	Fish That Occur at Pipeline Waterway Crossings		
				Salmonids <sup>e</sup>	Non-Salmonids <sup>f</sup>	
Columbia River (BOR)	223	64	HDD	<b>RB, BC, SHS, CSP, CF, CS</b>	LMB, SMB, WAL, CC, <u>WS</u> , <u>PL</u> , WC, SR, CM, BRS, LSS, LNS, NSF, SD, LND, LD, RS, GF, PM, LC, BC, YP, PS, COT, CP, BBH, WF	
Unnamed (BOR)	232	69	Avoided		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>	
Royal Branch Canal (BOR)	233	69	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>	
Canal (BOR)	234	69	B		<b>LMB, SMB, BC, YP, PS, CP, COT, BG</b>	
Royal Branch Canal (BOR)	235	70	B		<b>LMB, CP, YP, BC, PS, BBH</b>	
Canal (BOR)	236	71	B		CP, YP, PS, <b>LMB, COT, BG, BC</b>	
Crab Creek Lateral (BOR)	237	71	B		<b>LMB, COT, CP, YP, PS</b>	
Unnamed (USFWS)	240	75	F		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>	
Canal (USFWS)	241	75	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>	
Canal (USFWS)	242	76	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>	
Unnamed (USFWS)	243	77	Avoided		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>	
Canal (USFWS)	26-A	78	DRY or F		<b>LMB, SMB, BC, YP, PS, CP, COT, BG, LND, RS, SD</b>	
Canal	26-B	78	DRY or F		<b>LMB, SMB, BC, YP, PS, CP, COT, BG, LND, RS, SD</b>	
Lower Crab Creek	26-C	78	D	<b>RB, BT</b>	<b>LMB, SMB, BC, YP, PS, CP, COT, BG, LND, RS, SD</b>	
Lower Crab Creek	26-D	78	D	<b>RB, BT</b>	<b>LMB, SMB, BC, YP, PS, CP, COT, BG, LND, RS, SD</b>	
Lower Crab Creek	26-E	79	D or F	<b>RB, BT</b>	<b>LMB, SMB, BC, YP, PS, CP, COT, BG, LND, RS, SD</b>	
Canal (USFWS)	26-F	79	DRY or F		<b>LMB, SMB, BC, YP, PS, CP, COT, BG, LND, RS, SD</b>	
Canal (BOR)	26-G	79	DRY or F		<b>LMB, SMB, BC, YP, PS, CP, COT, BG, LND, RS, SD</b>	
Canal (BOR)	26-H	79	DRY or B		<b>LMB, SMB, BC, YP, PS, CP, COT, BG, LND, RS, SD</b>	
Canal (BOR)	26-J	79	DRY or F		<b>LMB, SMB, BC, YP, PS, CP, COT, BG, LND, RS, SD</b>	
Canal (BOR)	255	82	B		CP, YP, PS, <b>LMB, COT, BG, BC</b>	

Waterway	Crossing Number <sup>b</sup>	Atlas Page <sup>c</sup>	Crossing Type <sup>d</sup>	Fish That Occur at Pipeline Waterway Crossings	
				Salmonids <sup>e</sup>	Non-Salmonids <sup>f</sup>
Canal (BOR)	256	82	B		<b>LMB, COT, CP, YP, PS</b>
Canal (BOR)	257	83	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Wahluke Branch Canal	258	84	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Unnamed (BOR)	259	85	F or DRY		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	260	85	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	261	86	B		<b>LMB, COT, PS, YP, CP</b>
Unnamed (BOR)	262	87	F or D		<b>LMB, CP, YP, PS, COT, BG, BC</b>
Unnamed (BOR)	263	87	F or OC		<b>LMB, CP, YP, PS, COT</b>
Canal (BOR)	264	88	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	265	88	F or B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	266	89	F or B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	267	89	F or B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Unnamed (BOR)	268	89	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	269	89	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Potholes Canal (BOR)	270	90	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	271	90	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	272	91	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	273	91	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Eltopia Branch Canal (BOR)	274	91	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	275	92	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	276	92	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	277	93	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>
Canal (BOR)	278	93	B		<b>LMB, YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS</b>

Waterway	Crossing Number <sup>b</sup>	Atlas Page <sup>c</sup>	Crossing Type <sup>d</sup>	Fish That Occur at Pipeline Waterway Crossings	
				Salmonids <sup>e</sup>	Non-Salmonids <sup>f</sup>
Canal (BOR)	279	94	B		<b>LMB</b> , YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS
Canal (BOR)	280	94	B		<b>LMB</b> , YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS
Canal	281	95	B		<b>LMB</b> , YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS
Canal	282	95	B		<b>LMB</b> , YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS
Esquatzel Diversion Canal (BOR)	283	96	Bridge		<b>LMB</b> , YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS
Esquatzel Coulee	284	96	F		<b>LMB</b> , YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS
Canal	285	99	B		<b>LMB</b> , YYP, BG, BBH, PS, COT, CP, LRS, BC, SD, LND, RS
<b>Alternate Route (Originally on Preferred Alignment)</b>					
Parke Creek	208	55	D or F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Parke Creek	209	55	DRY or F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Parke Creek (BLM)	211	55	DRY or F	<b>RB</b>	COT, WF, LRS, LND, SD, RS, LD
Lower Crab Creek	244	77	D		<b>LMB</b> , <b>SMB</b> , BC, YP, PS, CP, COT, BG
Unnamed	246	78	F		CP, YP, BC, PS, BBH

Source: OPL 1998.

<sup>a</sup> Table lists only streams with potential fisheries values.

<sup>b</sup> Dames and Moore's waterway crossing number. Crossing number increases as you follow the pipeline west to east.

<sup>c</sup> Map Atlas page number for the waterway crossing.

<sup>d</sup> Crossing types: HDD - Horizontal Directional Drill; F - Flume; D - Divert; DRY - Dry Trench; WET - Wet Trench; B - Bore; Bridge - Bridge; OC - Over Culvert; UC - Under Culvert

<sup>e</sup> Fish presence at a downstream location is indicated by a AD. Abbreviations for salmonid names are as follows (Underlined abbreviations represent anadromous species and abbreviations in bold represent Washington State Priority Species):

<u>BC</u> or <b>BC</b> =Bull Trout	<u>CH</u> =Chum Salmon	<u>CT</u> =Cutthroat Trout	<u>K</u> =Kokanee	<u>RS</u> =Sockeye Salmon	<b>SHW</b> =Steelhead Trout (Winter-run)
<b>Bt</b> =Brown Trout	<u>CS</u> =Chinook Salmon	<u>DV</u> =Dolly Varden (Summer-run)	<u>PS</u> =Pink Salmon	<b>SCT</b> =Sea-run Cutthroat Trout	<u>SS</u> =Silver (coho) Salmon

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<b>CF</b> =Chinook (Fall-run)	<b>CSP</b> =Chinook Salmon (Spring-run)	EB=Eastern Brook Trout		<b>RB</b> =Rainbow Trout <b>SHS</b> =Steelhead Trout (Summer-run)	<b>WCT</b> =Westslope Cutthroat Trout
<sup>f</sup> Fish presence at a downstream location is indicated by a <b>AD.</b> Abbreviations for non-salmonid fish names are as follows (Underlined abbreviations represent anadromous species and abbreviations in bold represent Washington State Priority Species)(Whitefish species are listed with non-salmonid species):					
BBH=Brown Bullhead	COT=Sculpin	LMB=Largemouth Bass	<u>PL</u> =Pacific Lamprey	SD=Speckled Dace	WL=Western Brook Lamprey
BC=Black Crappie	CP=Carp	LND=Longnose Dace	PM=Peamouth	<b>SMB</b> =Smallmouth Bass	<b>WS</b> =White Sturgeon
BG=Bluegill	GF=Goldfish	LNS=Longnose Sucker	PS=Pumpkinseed	<b>SR</b> =Sandroller	YP=Yellow Perch
BTS=Bridgelip Sucker	<b>GS</b> =Green Sturgeon	LRS=Largescale Sucker	<b>PW</b> =Pygmy Whitefish	TS=Three Spined Stickleback	BR=Burbot
CC=Channel Catfish	LC=Lake Chub	MS=Mountain Sucker	<u>RL</u> =River Lamprey	<b>WAL</b> =Walleye	WF=Mountain Whitefish
CM=Chiselmouth	LD=Leopard Dace	NSF=Northern Squawfish	RS=Redside Shiner	WC=White Crappie	
BLM = U.S. Bureau of Land Management administered federal lands. BOR - U.S. Bureau of Reclamation administered federal lands. USFS = U.S. Forest Service administered federal lands. USFWS = U.S. Fish and Wildlife Service administered federal lands.					

**Appendix D. Table D-2. Pipeline Stream Crossings, Fisheries Utilization, Salmonid Habitat, Potential Impact Area, Sensitivity Index, and Proposed Crossing Methods**

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
<b>SNOHOMISH COUNTY</b> <b>Sammamish Basin</b>															
Little Bear Creek	Sammamish River	1	1	2, 3 FC	3	X		X	X	X	609	H	T	2	D
Unnamed	Little Bear Creek	2	1				X				90	N	S	5	F
Unnamed	Little Bear Creek	3	1				X				180	N	S	4	F
Unnamed	Little Bear Creek	4	1	2, 3 FC	3	X		X	X	X	NI	H	N	3	UC
Unnamed	Little Bear Creek	5	2				X				99	N	S	4	D
Unnamed	Little Bear Creek	6	3				X				W	N	-	NA	WETLAND
<b>Snohomish Basin</b>															
Anderson Creek	Snohomish River	7	3				X				NI	N	N	5	UC
Unnamed	Anderson Creek	8	4				X				W	N	-	NA	WETLAND
<b>Snoqualmie Basin</b>															
Ricci Creek	Snoqualmie River	9	4		3	X		X	X		690	M	S	3	D
Unnamed	Snoqualmie River	10	4				X				NC	N	NR	NR	DRY
Unnamed	Snoqualmie River	10A	5				X				NI	N	N	4	UC
Snoqualmie River	Snohomish River	11	5	2, 3, PT	3, PT	2, 3		X	X		NI	H	N	1	BRIDGE

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Unnamed	Snoqualmie River	12	5				X				NI	N	-	NA	Avoided
Unnamed	Snoqualmie River	13	5				X				198	N	S	4	F
Peoples Creek	Snoqualmie River	14	6	2, 3 FC	3	X		X			NI	H	N	3	OC
Unnamed	Peoples Creek	14A	6				X				99	N	S	4	D
Peoples Creek	Snoqualmie River	15	6		3	X		X			294	M	S	4	F
Unnamed	Peoples Creek	16	6				X				NI	N	N	5	OC
<b>KING COUNTY Snoqualmie Basin</b>															
Unnamed	N.F. Cherry Creek	17	7		3	X		X			NI	M	N	3	OC
Unnamed	N.F. Cherry Creek	18	7	2, 3 FC	3	X		X			345	H	S	3	F
N.F. Cherry Creek	Cherry Creek	19	8	2, 3 FC	3	X			X		345	M	S	3	F or D
Cherry Creek	Snoqualmie River	20	8	2, 3, PT	3	X		X	X	X	1575	H	S	1	D or F
Unnamed	Cherry Creek	21	8				X				W	N	-	NA	WETLAND
Harris Creek	Snoqualmie River	22	9	2, 3 PT	3	X		X	X		768	H	S	2	D
Unnamed	Harris Creek	23	9		3	X		X	X		198	M	S	3	F
Unnamed	Harris Creek	24	9				X				120	N	S	4	F
Unnamed	Harris Creek	25	10				X				W	N	-	NA	WETLAND
Unnamed	Tolt River	25A	11				X				90	N	NR	5	F
Tolt River	Snoqualmie River	26	11	2, 3, PT	3	X		X		X	7872	H	T	1	D

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Tolt River (side channel)	Snoqualmie River	27	11	2, 3, PT	3	X		X		X	984	H	T	1	D
Griffin Creek	Snoqualmie River	28	12	2, 3 FC	3	X		X	X	X	471	H	T	1	D
Unnamed	Griffin Creek	29	12	D	D	D	X				NI	H	N	5	OC
Unnamed	Griffin Creek	30	12				X				W	N	-	NA	WETLAND
Unnamed	Griffin Creek	31	12	D	D	D	X				NI	H	N	4	OC
Unnamed	Tokul Creek	32	13				X				NI	N	N	4	OC
Unnamed	Tokul Creek	33	14				X				NI	N	-	NA	Avoided
Tokul Creek	Snoqualmie River	34	14		3	X		X	X	X	NI	M	T	1	Bridge
Unnamed	Mill Pond	35	14		3	X		X	X		NI	M	N	3	OC
Unnamed	Mill Pond	36	14				X				48	N	T	5	F
Unnamed	Pond	36A	14				X				NI	N	N or T	4	OC
Unnamed	Pond	37	14				X				NI	N	T	4	OC
Snoqualmie River	Snohomish River	38	14		3	X		X	X	X	NI	M	N	1	BRIDGE
Meadowbrook Slough	Snoqualmie River	39	15		3	X		X	X		NI	M	N	2	BRIDGE
Meadowbrook Slough	Snoqualmie River	39A	15		3	X		X	X		NI	M	NR	2	BRIDGE
Unnamed	S.F. Snoqualmie R.	40	15				X				NI	N	N	5	BRIDGE
Unnamed	S.F. Snoqualmie R.	41	15		3	X			X		NI	M	N	3	BRIDGE
S.F. Snoqualmie R.	Snoqualmie River	42	15		3			X			NI	M	N	1	BRIDGE
S.F. Snoqualmie R.	Snoqualmie River	43	17		3			X			NI	M	N	1	BRIDGE

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Boxley Creek	S.F. Snoqualmie R.	44	17		3			X	X	X	1770	M	T	1	F or D
Unnamed	S.F. Snoqualmie R.	44A	17				X				NI	N	N	4	UC
Unnamed	S.F. Snoqualmie R.	45	18				X				NI	N	N	3	OC
Unnamed (BLM)	S.F. Snoqualmie R.	46	18				X				NI	N	N	3	OC
Unnamed (BLM)	S.F. Snoqualmie R.	47	18				X				NI	N	N	4	OC
Unnamed	S.F. Snoqualmie R.	48	18				X				NI	N	N	4	OC
Unnamed	S.F. Snoqualmie R.	49	18				X				NI	N	N	4	OC
Unnamed	S.F. Snoqualmie R.	50	19		3	X	D	X		X	NI	M	N	5	OC
Unnamed	S.F. Snoqualmie R.	51	19				D				NI	L	N	5	OC
Change Creek	S.F. Snoqualmie R.	52	19		3	X	D	X	X	X	NI	M	N	3	BRIDGE
Hall Creek	S.F. Snoqualmie R.	53	19		3	X	D	X	X		480	M	G	3	WET
Unnamed	S.F. Snoqualmie R.	54	19				D				NI	L	N	5	OC
Unnamed	S.F. Snoqualmie R.	55	19		3	X	D	X		X	NI	M	N	5	OC
Unnamed	S.F. Snoqualmie R.	56	19				D				NI	N	N	5	OC
Mine Creek	S.F. Snoqualmie R.	57	19		3	X	D	X	X	X	540	M	T	3	WET
Unnamed	S.F. Snoqualmie	58	20				X				NI	N	N	5	OC

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
	R.														
Wood Creek	S.F. Snoqualmie R.	59	20	D	D						NI	M	N	4	OC
Alice Creek	S.F. Snoqualmie R.	60	20	D	D						NI	M	N	3	OC
Unnamed	Unnamed Tributary	61	20				X				NI	N	N	4	UC
Unnamed (USFS)	S.F. Snoqualmie R.	62	20				X				NI	N	N	4	OC
Unnamed (USFS)	S.F. Snoqualmie R	62A	20				X				NI	N	N	5	OC
Unnamed (USFS)	S.F. Snoqualmie R	62B	20				X				NI	N	N	4	OC
Unnamed (USFS)	S.F. Snoqualmie R	62C	20				X				NI	N	N	5	OC
Unnamed (USFS)	Unnamed Tributary	63	20				X				NI	N	N	5	OC
Unnamed (USFS)	S.F. Snoqualmie R.	64	21				X				NI	N	N	5	UC
Unnamed (USFS)	S.F. Snoqualmie R.	65	21				X				NI	N	N	4	OC
Rock Creek (USFS)	S.F. Snoqualmie R.	66	21				X				450	N	N	4	D
Unnamed (USFS)	S.F. Snoqualmie R.	66A	21				X				NI	N	N	3	OC
Harris Creek (USFS)	S.F. Snoqualmie R.	67	21				X				450	N	N	3	D
Unnamed (USFS)	S.F. Snoqualmie R.	67A	21				X				NI	N	N	5	OC
Unnamed (USFS)	S.F. Snoqualmie R.	68	21				X				NI	N	N	4	OC

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Unnamed (USFS)	S.F. Snoqualmie R.	69	21				X				NC	N	NR	NR	DRY
Unnamed (USFS)	S.F. Snoqualmie R.	70	21				X				NI	N	T or N	4	UC
Unnamed (USFS)	S.F. Snoqualmie R.	71	21				X				NI	N	T or N	4	UC
Carter Creek	S.F. Snoqualmie R.	72	22		3	X	D		X		768	M	T	3	F or D
Unnamed	S.F. Snoqualmie R.	73	22				D				NI	L	T	4	UC
Unnamed	S.F. Snoqualmie R.	73A	22				D				NI	L	N	5	UC
Unnamed (USFS)	Hansen Creek	74	22				D				NI	L	T	5	UC
Hansen Creek (USFS)	S.F. Snoqualmie R.	75	22		3	X	D	X			1182	M	U	3	F or D
Unnamed (USFS)	Pond	76	22				X				NI	N	T or N	4	UC
Unnamed (USFS)	S.F. Snoqualmie R.	77	22		3	X	D				NI	M	T or N	4	UC
Humpback Creek (USFS)	S.F. Snoqualmie R.	78	23		3	D					1119	M	T	3	WET
Unnamed (USFS)	S.F. Snoqualmie R.	79	23				X				W	N	-	NA	WETLAND
Unnamed	S.F. Snoqualmie R.	80	23				X				W	N	-	NA	WETLAND
Unnamed	S.F. Snoqualmie R.	81	23				X				W	N	-	NA	WETLAND
Unnamed	S.F. Snoqualmie R.	82	24				X				240	N	G	5	D
Olallie Creek	S.F. Snoqualmie R.	83	24		D	D					414	M	G	4	D
Rockdale Creek	S.F. Snoqualmie	84	24		D	D					NI	M	-	3	Avoided

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
	R.														
<b>KITTITAS COUNTY</b> <b>Yakima Basin</b>															
Unnamed (USFS)	Keechelus Lake	85	25				X				NI	N	N	4	OC
Mill Creek (USFS)	Keechelus Lake	86	26		1, 3, T	1, 2		X		X	NI	H	N	3	OC
Unnamed (USFS)	Keechelus Lake	87	26				X				NI	N	N	4	OC
Cold Creek (USFS)	Keechelus Lake	88	26		1, 3, T	1, 2	X	X		X	NI	H	N or S	3	OC
Unnamed (USFS)	Keechelus Lake	89	26				X				NI	N	N	4	OC or UC
Unnamed (USFS)	Keechelus Lake	90	26				X				NI	N	N	4	OC or UC
Unnamed (USFS)	Keechelus Lake	91	26				X				NI	N	N	5	OC or UC
Unnamed (USFS)	Keechelus Lake	92	26				X				NI	N	N	5	OC or UC
Unnamed (USFS)	Keechelus Lake	93	26				X				NI	N	N	4	OC or UC
Unnamed (USFS)	Keechelus Lake	94	26				X				NI	N	N	4	OC or UC
Unnamed (USFS)	Keechelus Lake	95	26				X				NI	N	N	5	OC or UC
Unnamed (USFS)	Keechelus Lake	96	27				X				NI	N	N	5	OC or UC
Roaring Creek (USFS)	Keechelus Lake	97	27		1, 3, T	1, 2	X	X	X	X	846	H	N	2	D
Unnamed (USFS)	Keechelus Lake	98	27				X				NI	N	N	5	OC or UC
Meadow Creek (USFS)	Keechelus Lake	99	27		1, 3, T	1, 2	X	X	X	X	1200	H	N	3	D
Unnamed	Pond	100	27				X				NI	N	N	5	OC or UC
Unnamed	Yakima River	101	28				X				NI	N	N	4	OC or UC
Unnamed (USFS)	Yakima River	102	28				X				NI	N	N	4	OC or UC
Mosquito Creek (USFS)	Yakima River	103	28		3	X		X	X	X	471	M	S	3	D
Stampede Creek (USFS)	Yakima River	104	28		3	X		X	X	X	NI	M	N	4	OC or UC
Unnamed	Yakima River	105	29				X				NI	N	N	4	OC
Unnamed	Yakima River	106	29				X				NI	N	N	4	OC

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish X	Resident Habitat	Winter Refuge	Spawn Hab.					
Unnamed (USFS)	Yakima River	107	29				X				NI	N	N	4	OC
Unnamed	Yakima River	108	30				X				NI	N	N	4	OC
Unnamed	Yakima River	109	30				X				NI	N	N	4	OC
Unnamed	Yakima River	110	30				X				NI	N	N	4	OC
Unnamed	Yakima River	111	30				X				NI	N	N	3	OC
Unnamed	Yakima River	112	30				X				NI	N	N	4	OC
Unnamed		113	30				X				NC	N	NR	NR	DRY
Unnamed		114	30				X				NI	N	N	5	OC
Unnamed	Yakima River	115	31				X				NI	N	N	4	OC
Unnamed	Yakima River	116	31				X				NI	N	N	4	OC
Cabin Creek	Yakima River	117	31	2, 3, PT	3, T	X		X		X	984	H	S	1	D
Unnamed	Pond	118	31				X				NC	N	NR	NA	DRY
Unnamed	Pond	119	31				X				NI	N	N	NA	OC
Unnamed		120	31				X				NC	N	NR	NR	DRY
Unnamed	Lake Easton	121	32				X				NC	N	NR	MR	DRY
Unnamed	Yakima River	122	32				X				492	N	G	5	D or F
Main Canal		123	32		3	X					NI	L	N	NA	B
Tucker Creek	Yakima River	124	33		3	X				X	345	M	S	3	F
Main Canal		125	33		3	X					NI	L	N	NA	B
Unnamed	Big Creek	126	33				X				NI	N	N	5	UC
Big Creek	Yakima River	127	34	2, 3, PT	3	X		X		X	885	H	S	1	D or F
Unnamed	Yakima River	128	34				X				NC	N	NR	NR	DRY
Little Creek (USFS)	Yakima River	129	34	2, 3, PT	3	X		X		X	1182	H	S	2	D or F

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Peterson Creek	Granite Creek	130	35				X				294	N	S	4	D or F
Granite Creek	Yakima River	131	35		3	X		X		X	60	M	S	5	F
		131a	35												
Spex Arth Creek	Yakima River	132	36		3	X		X			NI	M	N	4	UC
Tillman Creek	Yakima River	133	37		3	X		X	X		99	M	S	4	F
Unnamed	Tillman Creek	134	37				X				99	N	S	5	F
Unnamed		135	38				X				198	N	S	4	F
Unnamed		136	38				X				NC	N	NR	NR	DRY
Unnamed		137	39				X				78	N	S	5	F
Unnamed		138	39				X				NC	N	NR	NR	DRY
Unnamed		139	39				X				NC	N	NR	NR	DRY
Unnamed		140	39				X				NC	N	NR	NR	DRY
Unnamed		141	40				X				99	N	S	5	F
Unnamed		142	40				X				294	N	S	4	F
Thornton Creek	Yakima River	143	40		3	X		X	X		147	M	S	5	D
Unnamed		144	40				X				NC	N	NR	NR	DRY
Unnamed		145	41				X				NC	N	NR	NR	DRY
Main Canal		146	41		3	X					NI	L	N	NA	B
Yakima River	Columbaia River	147	41	2, 3, PT	3, T	2		X		X	2166	H	T	1	D
Unnamed	Yakima River	148	42				X				W	N	-	NA	WETLAND
Unnamed	Pond	149	42				X				NC	N	NR	NR	DRY
		149a	42												
Unnamed	Swauk Creek	150	43				X				198	N	U	4	DRY
Swauk Creek	Yakima River	151	43	2, 3, PT	3, T	X		X		X	1476	H	S	2	F

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Unnamed	Swauk Creek	152	43				X				NC	N	NR	NR	DRY
Unnamed	Swauk Creek	153	43				X				NC	N	NR	NR	DRY
Unnamed	Dry	154	44				X				NC	N	NR	NR	DRY
Unnamed		155	44				X				NC	N	NR	NR	DRY
Dry Creek	Yakima River	156	44				X				393	N	S	4	DRY
Dry Creek	Yakima River	157	45				X				294	N	G	4	F or D
Unnamed	Dry Creek	158	45				X				99	N	G	4	F or D
Unnamed	Dry Creek	159	45				X				294	N	G	5	D or F
Dry Creek	Yakima River	160	45				X				NC	N	NR	NR	DRY
Dry Creek	Yakima River	161	45				X				492	N	G	5	D or F
Unnamed	Yakima River	162	45				X				90	N	G	5	F
Unnamed	Yakima River	163	46				X				165	N	G	5	F
Unnamed	Yakima River	163A	46				X				90	N	NR	5	DRY
Unnamed	Yakima River	163B	46				X				60	N	NR	5	DRY
Unnamed	Yakima River	163C	46				X				60	N	NR	5	DRY
Unnamed	Yakima River	164	46				X				NC	N	G	5	F
Unnamed	Yakima River	165	46				X				60	N	G	3	F
Unnamed	Yakima River	165A	46				X				60	N	NR	3	F
Reecer Creek	Yakima River	166	46	3	X				X	X	90	M	S	3	D
Unnamed	Yakima River	166A	46				X				90	N	NR	5	DRY
Unnamed	Yakima River	167	46				X				90	N	G	5	F
Jones Creek	Yakima River	168	46	3	X		X				108	M	S	3	D
Jones Creek	Yakima River	169	46	3	X		X				108	M	G	3	F
Jones Creek	Yakima River	170	47	3	X		X				150	M	G	4	F
Unnamed	Pond	171	47				X				30	N	G	5	F or DRY

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Unnamed	Currier Creek	172	47				X				120	N	S	4	F or DRY
Unnamed	Currier Creek	173	47				X				90	N	G	5	F
North Branch Canal	Yakima River	174	47		3	X					NI	L	N	NA	B
Unnamed	Currier Creek	175	47				X				246	N	S	4	D or F
Unnamed	Currier Creek	176	47		3	X		X			C	L	NR	NR	F
Currier Creek	Yakima River	177	47		3	X				X	609	M	S	4	F
Unnamed	Currier Creek	178	47				X				90	N	G	5	F
Unnamed	Currier Creek	179	48				X				60	N	G	5	F
Currier Creek	Yakima River	180	48				X				90	N	S	4	F
Unnamed	Yakima River	181	48		3	X					C	L	NR	NR	D or F
Unnamed	Yakima River	182	48		3	X					C	L	NR	NR	F
Unnamed		183	49		3	X					C	L	NR	NR	F
Unnamed	Yakima River	184	49				X				207	N	S	5	D or F
Unnnamed	Yakima River	185	49		3	X					C	L	NR	NR	F
Mercer Creek	Yakima River	186	49				X				690	N	T	5	D or F
Wilson Creek	Yakima River	187	49		3	X		X			690	M	S	4	D or F
Canal		188	50		3	X					NI	L	N	NA	B
Canal		189	50		3	X					NI	L	N	NA	B
Naneum Creek	Yakima River	190	50		3	X		X			393	M	S	4	D or F
Unnamed	Naneum Creek	191	50				X				NI	N	-	NA	Avoided
Unnamed	Naneum Creek	192	50				X				NI	N	-	NA	Avoided
Naneum Creek	Yakima River	193	50		3	X		X			393	M	G	4	D or F
Cascade Canal		194	51		3	X					NI	L	N	NA	B
Unnamed	Coleman Creek	195	51		3	X					C	L	NR	NR	F
Coleman Creek	Yakima River	196	51		3	X		X			492	M	T	4	D or F

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Unnamed	Coleman creek	197	51			X					N/A	N	S	5	D or F
Canal		198	51		3	X					NI	L	NR	NA	B
Cooke Creek	Cherry Creek	199	52		3	X					N/A	M	G	4	WET
Caribou Creek	Cherry Creek	200	52				X				NI	N	G	4	Bridge
Parke	Cherry Creek	201	52				X				NC	N	NR	NR	DRY
Unnamed	Parke Creek	202	52				X				NC	N	NR	NR	DRY
Cascade Canal		203	53		3	X					NI	L	N	NA	B
Unnamed	Parke Creek	204	53				X				NC	N	G	5	D or F
Parke Creek	Cherry Creek	205	53		3	X		X			180	M	S	3	D or F
Unnamed	Cherry Creek	205A	54				X				90	N	NR	5	DRY
Parke Creek	Cherry Creek	206	54		3	X		X			180	M	S	4	D or F
Highline Canal		207	55		3	X					NI	L	N	NA	B
Unnamed	Parke Creek	1-F	55				X				NC	N	NR	5	F or D
Unnamed	Parke Creek	1-E	55				X				60	N	NR	4	DRY
Parke Creek	Cherry Creek	1-A	55				X				45	N	NR	5	DRY
Canal		1-I	55				X				C	N	NR	NA	F
Canal		1-J	55				X				C	L	NR	NA	D or F
Unnamed	Parke Creek	1-G	56				X				450	N	NR	4	DRY or F
Unnamed	Parke Creek	1-B	56				X				450	N	NR	4	DRY or F
Unnamed	Parke Creek	1-C	56				X				300	N	NR	5	DRY
Unnamed	Parke Creek	1-K	56				X				120	N	NR	5	DRY
<b>Columbia Basin</b>															
Unnamed	Ryegrass Coulee	1-D	57				X				90	N	NR	5	DRY
Unnamed	Ryegrass Coulee	1-L	57				X				120	N	NR	5	DRY
Unnamed	Rocky Coulee	1-H	58				X				90	N	NR	5	DRY or F

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Unnamed	Rocky Coulee	1-M	59				X				90	N	NR	5	DRY
Unnamed	Ryegrass Coulee	9-B	61				X				90	N	NR	5	DRY
Ryegrass Coulee	Columbia River	9-A	61				X				360	N	N	3	DRY
Unnamed	Ryegrass Coulee	14-A	61a				X				360	N	S	5	DRY
Unnamed (DOD)	Columbia River	16-L	62a				X				NC	N	NR	NA	DRY
Getty's Cove (BLM)	Columbia River	18-A	63	2,3,E, PT	3, PT	2,3					15000	H	G	1	D
Unnamed	Columbia River	23-A	63				X				150	N	S	5	DRY
Columbia River (BOR)	Pacific Ocean	223	64	2, 3, E, PT	3, PT	2, 3		X	X		NI	H	N	1	HDD
<b>GRANT COUNTY</b> <b>Columbia Basin</b>															
Unnamed (BOR)	Columbia River	224	65				X				NC	N	NR	NR	DRY
Unnamed (BOR)	Nunnally Lakes	225	66				X				90	N	S	5	F
Unnamed	Nunnally Lakes	226	67				X				NC	N	-	NA	DRY
Unnamed	Nunnally Lakes	227	67				X				75	N	-	NA	F
Unnamed (BOR)	Nunnally Lakes	228	67				X				120	N	S	4	F
Unnamed	Nunnally Lakes	229	68				X				NC	N	NR	NR	DRY
Unnamed	Lower Crab Creek	230	69				X				198	N	G	5	F
Unnamed	Lower Crab Creek	231	69				X				99	N	G	5	F
Unnamed (BOR)	Lower Crab Creek	232	69			3					NI	L	-	NA	Avoided
Royal Branch Canal (BOR)	Lower Crab Creek	233	69			3					NI	L	N	NA	B

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Canal (BOR)	Lower Crab Creek	234	69			3					NI	L	N	NA	B
Royal Branch Canal (BOR)	Lower Crab Creek	235	70			3					NI	L	N	NA	B
Canal (BOR)	Lower Crab Creek	236	71			3					NI	L	N	NA	B
Crab Creek Lateral (BOR)	Lower Crab Creek	237	71			3					NI	L	NR	NR	B
Unnamed	Lower Crab Creek	238	73				X				NC	N	NR	NR	F or Dry
Unnamed	Lower Crab Creek	239	74				X				225	N	G	5	F
Unnamed (USFWS)	Lower Crab Creek	240	75			3					C	L	NR	NR	F
Canal (USFWS)		241	75			3					NI	L	NR	NA	B
Canal (USFWS)		242	76			3					NI	L	NR	NA	B
Unnamed (USFWS)	Lower Crab Creek	243	77			3					NI	L	NR	NA	Avoided
Canal (USFWS)	Lower Crab Creek	26-A	78			3					C	L	NR	NA	DRY or F
Canal	Lower Crab Creek	26-B	78			3					C	L	NR	NA	DRY or F
Lower Crab Creek	Columbia River	26-C	78		3	3					600	M	G	2	D
Lower Crab Creek	Columbia River	26-D	78		3	3					600	M	G	2	D
Lower Crab Creek	Columbia River	26-E	79		3	3					1500	M	G	2	F or D
Canal (USFWS)		26-F	79			3					C	L	NR	NA	DRY or F
Canal (BOR)		26-G	79			3					C	L	NR	NA	DRY or F
Canal (BOR)		26-H	79			3					C	L	NR	NA	DRY or B
Unnamed (BOR)		26-I	79				X				NC	N	NR	NA	DRY

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Canal (BOR)		26-J	79			3					C	L	NR	NA	DRY or F
Unnamed (BOR)		252	80				X				NC	N	NR	NR	DRY
Unnamed (BOR)		253	80				X				NC	N	NR	NR	DRY
Unnamed		254	80				X				NC	N	NR	NR	DRY
<b>ADAMS COUNTY</b> <b>Columbia Basin</b>															
Canal (BOR)		255	82			3					NI	L	N	NA	B
Canal (BOR)		256	82			3					NI	L	N	NA	B
<b>FRANKLIN COUNTY</b> <b>Columbia Basin</b>															
Canal (BOR)		257	83			3					NI	L	N	NA	B
Wahluke Branch Canal		258	84			3					NI	L	N	NA	B
Unnamed (BOR)		259	85			3					C	L	NR	NR	F or DRY
Canal (BOR)		260	85			3					NI	L	N	NA	B
Canal (BOR)		261	86			3					NI	L	N	NA	B
Unnamed (BOR)	Eagle Lake Wetland	262	87			3					780	L	T	3	F or D
Unnamed (BOR)		263	87			3					120	L	S	5	F or OC
Canal (BOR)		264	88			3					NI	L	N	NA	B
Canal (BOR)		265	88			3					NI	L	NR	NA	F or B
Canal (BOR)		266	89			3					NI	L	NR	NA	F or B
Canal (BOR)		267	89			3					NI	L	NR	NA	F or B
Unnamed (BOR)		268	89			3					NI	L	N	NR	B
Canal (BOR)		269	89			3					NI	L	N	NA	B
Potholes Canal (BOR)		270	90			3					NI	L	N	NA	B
Canal (BOR)		271	90			3					NI	L	N	NA	B

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Canal (BOR)		272	91			3					NI	L	N	NA	B
Canal (BOR)		273	91			3					NI	L	N	NA	B
Eltopia Branch Canal (BOR)		274	91			3					NI	L	N	NA	B
Canal (BOR)		275	92			3					NI	L	N	NA	B
Canal (BOR)		276	92			3					NI	L	N	NA	B
Canal (BOR)		277	93			3					NI	L	N	NA	B
Canal (BOR)		278	93			3					NI	L	N	NA	B
Canal (BOR)		279	94			3					NI	L	N	NA	B
Canal (BOR)		280	94			3					NI	L	N	NA	B
Canal		281	95			3					NI	L	N	NA	B
Canal		282	95			3					NI	L	N	NA	B
Esquatzel Diversion Canal (BOR)		283	96			3					NI	L	N	NA	Bridge
Esquatzel Coulee		284	96			3					630	L	G	1	F
Canal		285	99			3					NI	L	N	NA	B
<b>KITTITAS COUNTY</b> <b>Yakima Basin</b>															
<b>Alternate Route (Originally on Preferred Alignment)</b>															
Parke Creek	Cherry Creek	208	55		3	X		X			513	M	S	5	D or F
Parke Creek	Cherry Creek	209	55		3	X		X			240	M	S	5	F or DRY
Unnamed (BLM)	Parke Creek	210	55				X				90	N	G	5	F or DRY
Parke Creek (BLM)	Cherry Creek	211	55		3	X		X			300	M	G	5	F or DRY
Unnamed (DOD)	Parke Creek	212	56				X				NC	N	NR	NR	F or DRY
Unnamed (DOD)	Parke Creek	213	56				X				NC	N	NR	NR	F or DRY
Unnamed (DOD)	Parke Creek	214	56				X				NC	N	NR	NR	F or DRY
Unnamed (DOD)	Parke Creek	215	57				X				NC	N	S	4	F or DRY

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
<b>Columbia Basin</b>															
Unnamed (DOD)	Sagebrush Spring	216	61				X				444	N	S	4	F or DRY
Unnamed (DOD)	Sagebrush Spring	217	61				X				300	N	S	5	F or DRY
Unnamed (DOD)	Canyon Creek	218	62				X				360	N	S	4	F or DRY
Unnamed (DOD)	Canyon Creek	219	63				X				450	N	S	4	F or DRY
Middle Canyon Creek (DOD)	Johnson Creek	220	63				X				600	N	S	4	F or D
Middle Canyon Creek (DOD)	Johnson Creek	221	63				X				600	N	S	4	F or D
Johnson Creek (DOD)	Columbia River	222	63	2, 3						X	690	H	S	3	F
<b>Alternate Route #8</b>															
Ryegrass Coulee (DOD)	Columbia River	8-A	60				X				720	N	N	3	D
<b>Alternate Route #12</b>															
Unnamed	Columbia River	12-A	61				X				300	N	S	5	DRY
<b>Alternate Route #16</b>															
Unnamed	Columbia River	16-A	61a				X				180	N	G	5	DRY
Unnamed	Columbia River	16-B	61a				X				300	N	G	5	DRY
Unnamed	Columbia River	16-C	61a				X				NC	N	NR	NR	DRY
Unnamed	Columbia River	16-D	62a				X				150	N	G	5	DRY
Unnamed	Columbia River	16-E	62a				X				450	N	G	5	DRY
Unnamed	Columbia River	16-F	62a				X				150	N	G	5	DRY
Unnamed	Columbia River	16-G	62a				X				180	N	G	5	DRY
Unnamed	Columbia River	16-H	62a				X				180	N	G	5	DRY
Unnamed	Columbia River	16-I	62a				X				NC	N	G	NR	DRY

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Unnamed	Columbia River	16-J	62a				X				180	N	NR	5	DRY
Unnamed (DOD)	Columbia River	16-K	62a				X				90	N	G	5	DRY
<b>Alternate Route #19</b>															
Canyon Creek (DOD)	Columbia River	19-A	63				X				600	N	G	4	F or D
<b>Alternate Route #20</b>															
Johnson Creek (DOD)	Columbia River	20-A	63				X				690	N	S	3	F
<b>Alternate Route #22</b>															
Unnamed (DOD)	Columbia River	22-A	63				X				900	N	S	4	DRY
Unnamed (DOD)	Columbia River	22-B	63				X				450	N	NR	4	DRY
<b>Alternate Route #23</b>															
Unnamed (BLM)	Columbia River	23-B	63				X				90	N	S	5	DRY
<b>Alternate Route #24</b>															
Sand Hollow (BOR)	Columbia River	24-A	63a				X				NI	N	G	4	B
Canal (BOR)		24-B	64b				X				C	N	G	4	D or F
Unnamed (BOR)		24-C	65				X				210	N	-	NR	DRY
<b>GRANT COUNTY Columbia Basin</b>															
<b>Alternative Route (Originally on Preferred Alignment)</b>															
Lower Crab Creek	Columbia River	244	77			3					1674	L	NR	2	D
Unnamed	Lower Crab Creek	245	77				X				900	N	NR	2	F
Unnamed	Lower Crab Creek	246	78			X					984	L	NR	2	F
Unnamed (BOR)		247	78				X				NC	N	NR	NA	DRY
Unnamed (BOR)		248	79				X				NC	N	NR	NA	DRY
Unnamed		249	79				X				NC	N	NR	NA	DRY

Waterway and Federal Lands <sup>(a)</sup>	Tributary to	Crossing Number <sup>(b)</sup>	Atlas Page <sup>(c)</sup>	Fisheries Utilization <sup>(d)</sup>				Salmonid Habitat <sup>(e)</sup> at Crossing			Pot. Impact <sup>(f)</sup> (Sq. ft.)	Species Utiliz. Index <sup>(g)</sup>	Rip. Veg. <sup>(h)</sup>	DNR Chan <sup>(i)</sup>	Crossing Type <sup>(j)</sup>
				Anad. Sal.	Res. Sal.	Other sp.	No Fish	Resident Habitat	Winter Refuge	Spawn Hab.					
Unnamed		250	79				X				198	N	NR	S	D or F
Unnamed		251	80				X				198	N	NR	S	D or F

Source: Based on OPL 1998.

(a) Symbol indicates that the waterway is under the jurisdiction of the Army Corps of Engineers (ACOE) pursuant to Section 404 of the Clean Water Act. Symbol (n) indicates that the waterway is not an ACOE jurisdictional stream. Symbol (u) indicates that the ACOE jurisdictionality of the waterway is unknown at this time, additional field surveys will be completed to determine ACOE jurisdictionality. Symbol (w) indicates that the waterway is actually a wetland at the pipeline crossing point. Symbol (d) indicates that at the pipeline crossing point there is no defined channel. Symbol (c) indicates that the waterway is an irrigation canal with little or no fisheries value.

(b) Dames and Moore's waterway crossing number. Crossing number increases as you follow the pipeline west to east.

(c) Map Atlas (see Dames & Moore, 1996a) page number for the waterway crossing.

(d) Fisheries utilization: ANAD- anadromous fish; RES SAL-resident salmonids; OTHER SPECIES-other fish species; NO FISH- no known fisheries utilization. Fish presence at a downstream location is indicated by a AD@. A AD@ in the ANO FISH@ column indicates that sediment transport at the crossing has the potential of impacting fisheries resources in streams that the crossing stream is tributary to. Data from Washington Rivers Information System (WARIS) (WDFW, 1995a). If Washington State Priority species are present, the priority criteria are listed. If a species present is proposed for listing as threatened within the next year, it is noted by the symbol >PT= and if a species present is listed as endangered, it is noted by the symbol >E=

(e) Salmonid habitat types present at specific or general pipeline crossing locations.

(f) POT IMPACT - Potential impacted area for stream crossings. The area in square feet is calculated by multiplying the distance across a full stream channel in feet times a 30' wide trench cut. NI=no impact because no physical disturbance to stream channel occurs, NA=No information available, NC=No defined channel, C=Canal or irrigation ditch, and W=Wetland.

(g) Criteria for Sensitivity Index ratings are: HIGH (H)-stream contains anadromous fish, Washington state priority species (priority level 1 or 2) or a species expected to become a federal candidate for listing as threatened or endangered within the next 2 years; MODERATE (M)-stream contains resident salmonids and is not an irrigation canal; LOW (L)-stream contains non-salmonid Washington state priority level 3 fish species or is an irrigation canal that contains incidental resident salmonids. A sensitivity index of LOW is also applied to pipeline stream crossings occurring on non-fish bearing streams in locations where sedimentation from construction will affect a fish bearing stream; NO FISH (N)-no fish are present and sedimentation from construction will not affect a fish bearing stream.

(h) Riparian vegetation at stream crossing: for pipeline waterway crossings that involve invasive crossing methods - T (trees), S (shrubs), G (grass), U (unvegetated). For noninvasive crossings N (no or minimal riparian vegetation disturbance). Where no information was available from Dames & Moore (NR - not reported).

(i) DNR channel types - N/A indicates channels not classified by DNR (i.e., canals, wetlands, avoided). NR for no channel type reported by Dames & Moore.

(j) Crossing types: HDD - Horizontal Directional Drill; F - Flume; D - Divert; DRY - Dry Trench; WET - Wet Trench; B - Bore; BRIDGE - Bridge; OC - Over Culvert; UC -Under Culvert.

BLM = U.S. Bureau of Land Management administered federal lands.

BOR = U.S. Bureau of Reclamation administered federal lands.

DOD = U.S. Department of Defense (Yakima Training Center) administered federal lands.

USFS = U.S. Forest Service administered federal lands.

USFWS = U.S. Fish and Wildlife Service administered federal lands.